Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Dodson Division
Weyerhaeuser Company
Dodson, Winn Parish, Louisiana
Agency Interest Number: 4294
Activity Number: PER20060002
Draft Permit 3240-00010-V5

I. APPLICANT:

Company:

Weyerhaeuser Company P.O. Box 98 Dodson, LA 71422

Facility:

Dodson Division 706 Hwy 167, 1.5 miles north of Dodson, Winn Parish, Louisiana Approximate UTM coordinates are 529.25 kilometers East and 3553.99 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

The Dodson Division began operations prior to 1969 as Hunt Lumber Company. Permit Number 384 was granted November 8, 1974, for a wood waste boiler. Later, the facility was purchased by Willamette Industries, Inc. Consolidated Permit Number 3240-00010-01 was approved May 18, 1991 for a saw mill and a plywood plant. The initial Part 70 Operating Permit Number 3240-00010-V0 was issued June 5, 1997, and modified August 18, 1998, to include provisions of PSD-LA-627 for the Dry Kilns Replacement Project in 1989. The permit was modified again on October 26, 1999. The permit was modified again on January 7, 2002, which includes the provisions of Permit PSD-LA-627(M-1). The facility is currently permitted under Permit Number 3240-00010-V4, issued November 15, 2004.

This is the Part 70 operating permit for the facility

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Weyerhaeuser Co. on February 28, 2006 requesting a Part 70 operating permit renewal. Additional information dated May 19, 2006, and May 31, 2006 was also received.

Emission rates will be revised using updated testing of emissions done for VOC by Weyerhaeuser in the fall of 1994, and reviewed by LDEQ in April of 1995.

The Weyerhaeuser facility currently operates under a Part 70 permit. The facility also operates under a Prevention of Significant Deterioration permit (PSD), PSD-LA-627(M-1).

Permit #	Units or Sources	Date Issued
3240-00010-V4	008 – Cyclone Separator 017 – Wood Fired Boiler 020 – Ring Debarker 021 – Planer Mill Truck Bin Baghouse 027 – Dry Waste System Baghouse 030 – RTO/RCO 032 – Press Vents 033 – Dry Kiln #1 034 – Dry Kiln #2 035 – Dry Kiln #3 038 – Clipper Diverter Cyclone 040 – Steamvat Emissions 041 – Lathe Emissions Cooling Zone of Veneer Dryer #1 Cooling Zone of Veneer Dryer #2 031 – Fugitive Resin Emissions 036 – Green End Fugitive Emissions 037 – Dryer Fugitives 039 – Fugitive Ink Emissions	November 15, 2004
PSD-LA-627(M-1)	017 – Wood Fired Boiler 024 – Gasoline Tank 028 – Veneer Dryer No. 1 029 – Veneer Dryer No. 2 030 – RTO/RCO	January 7, 2002

Dodson Division Weyerhaeuser Company Dodson, Winn Parish, Louisiana Agency Interest Number: 4294 Activity Number: PER20060002

Draft Permit 3240-00010-V5

Permit #	Units or Sources	Date Issued
	031 - Fugitive Resin	
	032 – Press Vents	
	033 – Dry Kiln No. 1	
	034 – Dry Kiln No. 2	
	035 – Dry Kiln No. 3	
	008 - Cyclone Separator	
	020 - Ring Debarker	
	021 Planer Mill Truck Bin	
	026 - Waste Green Veneer Target Box	
	027 - Dry Waste System	

Project Description

Operations at the Dodson Division consist of a plywood plant and a saw mill. At the plywood plant, pine logs are debarked and cut to length, peeled into veneers, dried, glued, and pressed into panels. The panels are cut to size, sanded or tongue & grooved, and sold. Bark is burned in a boiler. Log ends are processed to green wood chips and sold to paper mills along with sawdust.

At the saw mill, pine logs are debarked, cut into rough lumber, dried, planed, and sold.

With this modification, Weyerhaeuser proposes to increase the annual lumber production from 185 MMBF/yr to 187 MMBF/yr. For operational flexibility, Weyerhaeuser is also proposing to cap emissions for Drying Kilns nos. 1, 2 and 3: Lumber Dry Kilns emissions cap, new source 042 to allow operational flexibility between the kilns.

Previous permitted source 024, a 250-gallon gasoline storage tank, is an existing emission source being deleted as an emission source and added to Insignificant Activities. Also, source 028, Cooling zones of Veneer Dryers #1 and #2, is being deleted and replaced with two separate capped sources 043, Cooling zone of Veneer Dryer #1 and 044, Cooling zone of Veneer Dryer #2. Their cap is source 045, Veneer Dryers Cooling zones Cap.

In concert with the increase in production, Weyerhaeuser proposes to replace the existing fans and motors in the Lumber Dry Kilns as well as installation of Linear High Grader instrumentation, a second in-line strapper, new planer feed and bridge tables, and a Cut-in-Two package saw in the Planer Mill. The installation of the Cut-in-Two package saw is intended to facilitate lumber cutting in bulk rather than the present one piece at a time. The Cut-in-Two package saw will slightly increase PM10 emissions.

Permitted Air Emissions

Estimated changes in permitted emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	51.74	49.63	- 2.11
SO ₂	24.60	24.64	+ 0.04
NO_X	204.34	211.54	+ 7.20
CO	479.87	485.99	+ 6.12
VOC *	463.35	466.25	+ 2.90

*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetaldehyde	0.760	0.760	0.000
Formaldehyde	16.530	16.670	+ 0.140
Methanol	31.080	31.330	+ 0.250
Phenol	1.310	1.310	0.000
Arsenic*	0.022	0.022	0.000
Barium*	0.166	0.166	0.000
Cadmium*	0.004	0.004	0.000
Chlorine*	0.774	0.774	0.000
Chromium*	0.003	0.003	0.000
Cobalt*	0.006	0.006	0.000
Copper*	0.048	0.048	0.000
Lead*	0.047	0.047	0.000
Manganese*	1.567	1.567	0.000
Mercury*	0.003	0.003	0.000
Nickel*	0.030	0.032	+ 0.002
Total	52.35	52.74	+ 0.392
VOC TAPs	49.68	50.07	+ 0.390
*Non-VOC TAPs	2.670	2.672	+ 0.002

Prevention of Significant Deterioration Applicability

The pollutants are not being increased by significant amounts by the project. Therefore, the proposed facility is not subject to the requirements of the PSD.

MACT Requirements

Dodson Division is a major source for toxic air pollutants and must address maximum achievable control technology (MACT) pursuant with the requirements of LAC 33:III.Chapter 51.

The facility complies with the ambient air standards (AAS). Standard Operating Procedures (SOP) outlined in the permit application was determined to be MACT, along with additional information in the tables. This facility is subject to 40 CFR 63 Subpart DDDD Plywood and Composite Wood Products.

Air Modeling Analysis

No dispersion modeling was performed.

General Condition XVII Activities

This permit does not authorize any General Condition XVII activities.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section VIII of the draft Part 70 permit.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

This application was reviewed for compliance with the Louisiana Part 70 operating permit program and Louisiana Air Quality Regulations. NSPS and NESHAP regulations do apply.

IV. Permit Shields

There is no permit shield.

V. Periodic Monitoring

Consent Decree

As required by Consent Decree, CV 00-1001-HA, the Dodson Division operates under a Parametric Monitoring Plan. This plan describes the Parametric Monitoring System implemented to demonstrate compliance with the minimum 90% destruction efficiency for all captured VOC emissions from the veneer dryers. A Geoenergy GeoTherm oxidizer unit was installed to accept the exhaust of the hot zones from both a combination steam/natural gas-fired veneer dryer and a natural gas-fired veneer dryer. The unit is operating as a Regenerative Catalytic Oxidizer (RCO), but is also capable of operating as a Regenerative Thermal Oxidizer (RTO). Two categories of parameters monitored are: Compliance Parameters and Operational Parameters.

Compliance parameters are average chamber temperature in degrees Fahrenheit and RCO exhaust airflow rate in standard cubic feet per minute. The compliance parameter thresholds are a maximum average combustion chamber temperature of 750 degrees Fahrenheit and a maximum exhaust air flow rate of 60,000 SCFM. These parameters are continuously monitored by the Parametric Monitoring System. The parameters are recorded every 15 minutes. The 15-minute recordings are averaged every 12 hours. Each 12-hour average is automatically compared to the Compliance Parameter Thresholds.

The operational parameters include the pressure differential across the RCO beds, the position of each dryer's abort gate, and an annual catalytic activity test. The Parametric Monitoring System continuously monitors the RCO pressure differential, which is the difference between the static pressures at the inlet and outlet of the unit. The pressure differential, measured in inches of water, is recorded at least every clock hour and averaged every 24-hour period. Monitoring pressure differential helps determine if the air passages in the ceramic media beds are plugging. A bakeout and/or washout will be conducted if the pressure differential data trend indicates unacceptable blockage. The position of each dryer's abort gate is monitored continuously and recorded every 15 minutes by the Parametric Monitoring System. When a dryer aborts, the dryer's operational status is automatically evaluated to determine if wood is being processed during the abort. If such a condition exists, a visual alarm is activated automatically and the accumulated minutes are recoded at the next 15-minute interval. A catalytic activity test will be conducted annually to help ensure the catalytic media retains enough oxidation potential to allow the facility to continue operating the RCO/RTO in catalytic mode to meet the 90% minimum destruction efficiency.

Compliance Assurance Monitoring

Federal regulation 40 CFR 64 Compliance Assurance Monitoring is applicable to this facility. Applicability for each pollutant, requires that the unit be subject to an emission limitation or standard and must use a control device to achieve compliance. The following emission sources with pollution control equipment have a pre-control emission rate of a pollutant over 100 tons per year and were determined to require a CAM Plan: 017-Wood Fired Boiler, 021-Planer Mill Truck Bin Baghouse, 027-Dry Waste System Baghouse, and 030-RTO/RCO.

The Wood Fired Boiler is equipped with an electrostatic precipitator (ESP), which serves to collect and reduce particulate emissions associated with the combustion of wood waste. A Continuous Opacity Monitoring System (COMS) has been installed to ensure that emissions are equal to or below the operating performance standard of 0.10 lb PM/MMBTU per 40 CFR 60.43b(c)(1). Should emissions exceed the 20 percent opacity limit, an internal alarm is signaled and corrective maintenance is conducted.

The Planer Mill Truck Bin Baghouse and the Dry Waste Baghouse serve to collect and reduce particulate emissions associated with the manufacture of lumber and plywood products. Opacity is used to determine if particulate emissions are exceeded. Daily visual examinations of emissions from the baghouses are conducted to determine the efficiency. Should the opacity check result in an observation of excess emissions, the filter elements will be inspected and if necessary, replaced. In addition, semiannual inspections of the filter elements will be conducted to determine if replacement is necessary. The Dwyer Magnahelic Differential Pressure Gauge measures the differential pressure between the material side and the clean side of the filter element. A differential pressure of three or more inches indicates that the bag should be replaced.

The Geoenergy GeoTherm Oxidizer Unit, RTO/RCO, accepts the exhaust of the hot zones of the veneer dryers. This system is monitored according to the Parametric Monitoring Plan mentioned previously. Startup was commenced on September 30, 2001, with full-time operation occurring on September 20, 2002. Compliance testing was was performed on September 26, 2002.

Applicability and Exemptions of Selected Subject Items VI. Notes Requirement ID No: Unit emits less Emission Standards for Sulfur EXEMPT. Dioxide Emission Limitations than 250 tons per year of EQT 6 sulfur dioxide. [LAC 33:1503.C] 017 - Wood Fired Boiler EXEMPT. Unit emits less Emission Standards for Sulfur EQT 22 and EQT 23 than 250 tons per year of Dioxide Emission Limitations 043 and 044 - Cooling Zones sulfur dioxide. [LAC 33:1503.C] of Veneer Dryers No. 1 and No. 2 EXEMPT. Unit emits less Emission Standards for Sulfur than 250 tons per year of Dioxide Emission Limitations EQT 13 sulfur dioxide. [LAC 33:1503.C] 030 - RTO/RCO

VII. Streamlin	ed Requirements		
Dodson Division	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
None			

VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide (H_2S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III. Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) - An oxide of sulphur.

Title V permit - See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.